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20. (Once Amended) A group A streptogramin derivative according to claim 17, wherein said group A streptogramin is (16R)-16-dimethylamino-16-deoxopristinamycin II_A or a salt thereof:

21. (Once Amended) A group A streptogramin derivative according to claim 17, wherein said group A streptogramin is (16R)-16-methoxyamino-16-deoxopristinamycin II_B or a salt thereof:

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22. (Once Amended) A group A streptogramin derivative according to claim 17, wherein said group A streptogramin is (16R)-16-ethoxyamino-16-deoxopristinamycin II_B or a salt thereof:

$$H_3C_{IM_{M_{1}}}$$
 $H_3C_{IM_{M_{1}}}$
 CH_3
 CH_3
 CH_3

23. (Once Amended) A group A streptogramin derivative according to claim 17, wherein said group A streptogramin is (16R)-16-allyloxyamino-16-deoxopristinamycin II_B or a salt thereof:

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24. (Once Amended) A group A streptogramin derivative according to claim 17, wherein said group A streptogramin is (16R)-16-methoxyamino-16-deoxopristinamycin II_A or a salt thereof:

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- 25. (Twice Amended) A process for preparing a group A streptogramin derivative according to claim 17, said process comprising:
- (a) preparing a group A streptogramin derivative, wherein R' is a hydrogen atom, by reacting for a time and under conditions to form a group A streptogramin according to claim 17, in the presence of a reducing agent, an amine of formula (III):

H₂N-R" (III)

wherein R" is defined as in claim 17 with a natural pristinamycin of formula (II):

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wherein R₂ is defined as in claim 17,

- (b) optionally reacting said group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom, with formaldehyde or a formaldehyde derivative to generate formaldehyde in situ for a time and under conditions to form a second intermediate compound, and then reacting said second intermediate compound with a reducing agent for a time and under conditions to form a group A streptogramin derivative, wherein R' is a methyl group, and
- (c) optionally converting said group A streptogramin derivative of formula (I), prepared by (a) or (b) above, to a salt and separating said salt, wherein the carbon bearing said R₁ is of the R configuration, or optionally separating said group A streptogramin derivative, wherein the carbon bearing said R₁ is of the R configuration.

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(IV)

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- 26. (Once Amended) A process for preparing a group A streptogramin derivative according to claim 17, said process comprising:
- (a) preparing an intermediate compound of formula (IV):

wherein R₂ and R" are defined as in claim 17

by reacting an amine of formula (III):

H₂N-R" (III)

wherein R" is chosen from -OR" groups, and wherein said R" groups are defined as in claim 17

with a natural pristinamycin of formula (II):

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wherein R₂ is defined as in claim 17,

for a time and under conditions to form said/intermediate compound of formula (IV),

- (b) isolating said intermediate compound of formula (IV),
- (c) reacting said isolated intermediate compound of formula (IV) with a reducing agent for a time and under conditions to form a group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom,
- (d) optionally reacting said group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom, with formaldehyde or a formaldehyde derivative capable of generating formaldehyde in situ for a time and under conditions to form a second intermediate compound, and then reacting said second intermediate

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compound with a reducing agent for a time and under conditions to form a group

A streptogramin derivative of formula (/), wherein R' is a methyl group, and

- (e) optionally converting said group A/streptogramin derivative of formula (I), prepared by (c) or (d) above, to a salt and/or separating its R-epimer.
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- 32. (Once Amended) A composition comprising at least one group A streptogramin derivative of formula (I) or salt thereof according to claim 17, wherein said composition comprises at least one pharmaceutically acceptable diluent, at least one pharmaceutically acceptable adjuvant, or at least one pharmaceutically acceptable diluent and at least one pharmaceutically acceptable adjuvant.
- 33. (Once Amended) A composition comprising at least one group A streptogramin derivative of formula (I) or salt thereof according to claim 17 and at least one group B streptogramin derivative, wherein said composition optionally comprises at least one pharmaceutically acceptable diluent, at least one pharmaceutically acceptable adjuvant, or at least one pharmaceutically acceptable diluent and at least one pharmaceutically acceptable adjuvant.
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1300 I Street, NW Washington, DC 20005 202.408.4000 Fax 202.408.4400 www.finnegan.com 34. (New) A process for preparing a group A streptogramin derivative according to claim 17, said process comprising:

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(a) preparing a group A streptogramin derivative, wherein R' is a hydrogen atom, by reacting for a time and under conditions to form a group A streptogramin according to claim 17, in the presence of a reducing agent, an amine of formula (III):

H₂N-R" (III)

wherein R" is defined as in claim 17 with a natural pristinamycin of formula (II):

$$H_3C_{M_{M_{N_1}}}$$
 OH CH_3 OH (II)

wherein R₂ is defined as in claim 17,

(b) optionally reacting said group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom, with formaldehyde or a formaldehyde derivative to generate formaldehyde in situ for a time and under conditions to form a second intermediate compound, and then reacting said second intermediate compound with a reducing agent for a time and under conditions to form a group A streptogramin derivative, wherein R' is a methyl group,

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- (c) optionally converting said group A streptogramin derivative of formula (I), prepared by (a) or (b) above, to a salt and separating said salt, wherein the carbon bearing said R₁ is of the R configuration, or optionally separating said group A streptogramin derivative, wherein the carbon bearing said R₁ is of the R configuration, and
- (d) isolating said group A streptogramin derivative of formula (I) or salt thereof, prepared by (a), (b), or (c) above.
- 35. (New) A process for preparing a group A streptogramin derivative according to claim 17, said process comprising:
- (a) preparing an intermediate compound of formula (IV):

wherein R_2 and R" are defined as in claim 17 by reacting an amine of formula (III):

$$H_2N-R"$$
 (III)

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wherein R" is chosen from -OR" groups, and wherein said R" groups are defined as in claim 17

with a natural pristinamycin of formula (II):

wherein R₂ is defined as in claim 17,

for a time and under conditions to form said intermediate compound of formula (IV),

- (b) isolating said intermediate compound of formula (IV),
- (c) reacting said isolated intermediate compound of formula (IV) with a reducing agent for a time and under conditions to form a group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom,

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(d) optionally reacting said group A streptogramin derivative of formula (I), wherein R' is a hydrogen atom, with formaldehyde or a formaldehyde derivative capable of generating formaldehyde in situ for a time and under conditions to form a second intermediate compound, and then reacting said second intermediate compound with a reducing agent for a time and under conditions to form a group A streptogramin derivative of formula (I), wherein R' is a methyl group,

- (e) optionally converting said group A streptogramin derivative of formula (I), prepared by (c) or (d) above, to a salt and/or separating its R-epimer, and
- (f) isolating said group A streptogramin derivative of formula (I) or salt thereof, prepared by (c), (d), or (e) above.

<u>REMARKS</u>

I. Status of the Claims

Claims 17-35 are pending in this application. New claims 34 and 35 have been added. Claims 20-26, 32, and 33 have been amended.

II. Rejection Under 35 U.S.C. § 112, First Paragraph

The rejection of claims 17-33 under 35 U.S.C. § 112, first paragraph, has been maintained.¹ (Office Action dated June 12, 2002, page 2, lines 10-13.) Specifically, the

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¹ Applicants thank the Examiner for clarifying that no rejection under 35 U.S.C. § 101 has been imposed. (Office Action dated June 12, 2002, page 2, lines 19-20; page 3, lines 8-9; and page 3, lines 10-11.)